

National Native Plant Materials Development Program: Ensuring Options For The Future

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by Steve Mc Cormack & Robert Tjian

- Plants are essential to the survival of our planet – to its ecology, biodiversity, and climate.
- Vigorous high-quality scientific research in the plant sciences will be crucial for the world's future.
- Yet basic plant science research has struggled to take root in the U.S. ... Federal support for fundamental plant science research has been less than 2%.
- The amount awarded on a competitive basis to academic and research institutions constitutes only about 2% of extramural spending for life sciences research (\$382 million out of \$17 billion in 2005).

National Native Plant Materials Development Program

- History of the Program
- Need for the Program
- Funding & Leveraging Investment
- Native Plant Materials Development Process
- Partners
- Accomplishments
- Coordination with LCC's & Contacts
- Future Priorities

Level III Ecoregions of Western U.S. and BLM Management Areas



National Native Plant Materials Development Program

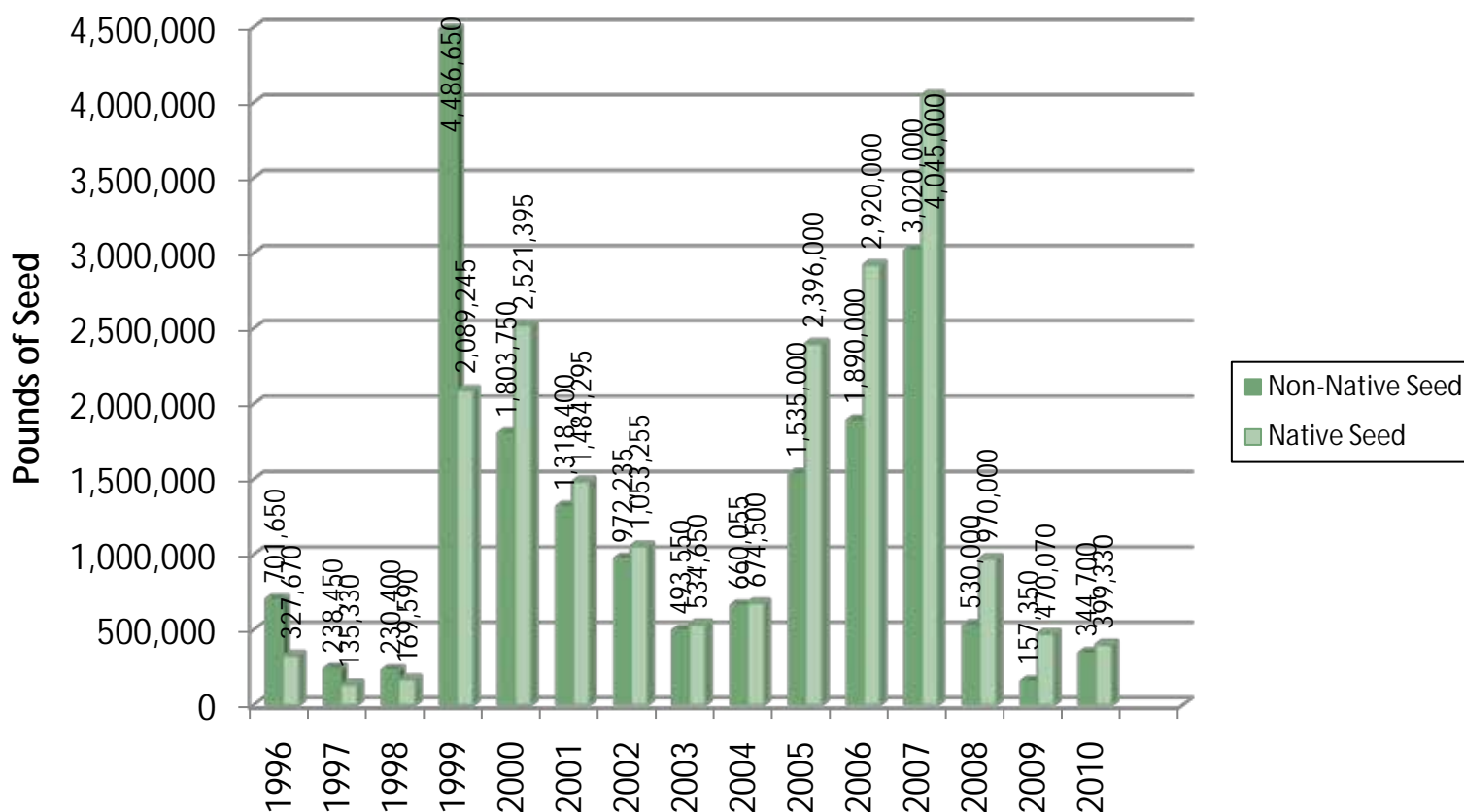


House of Representatives' FY2001 Conference Report

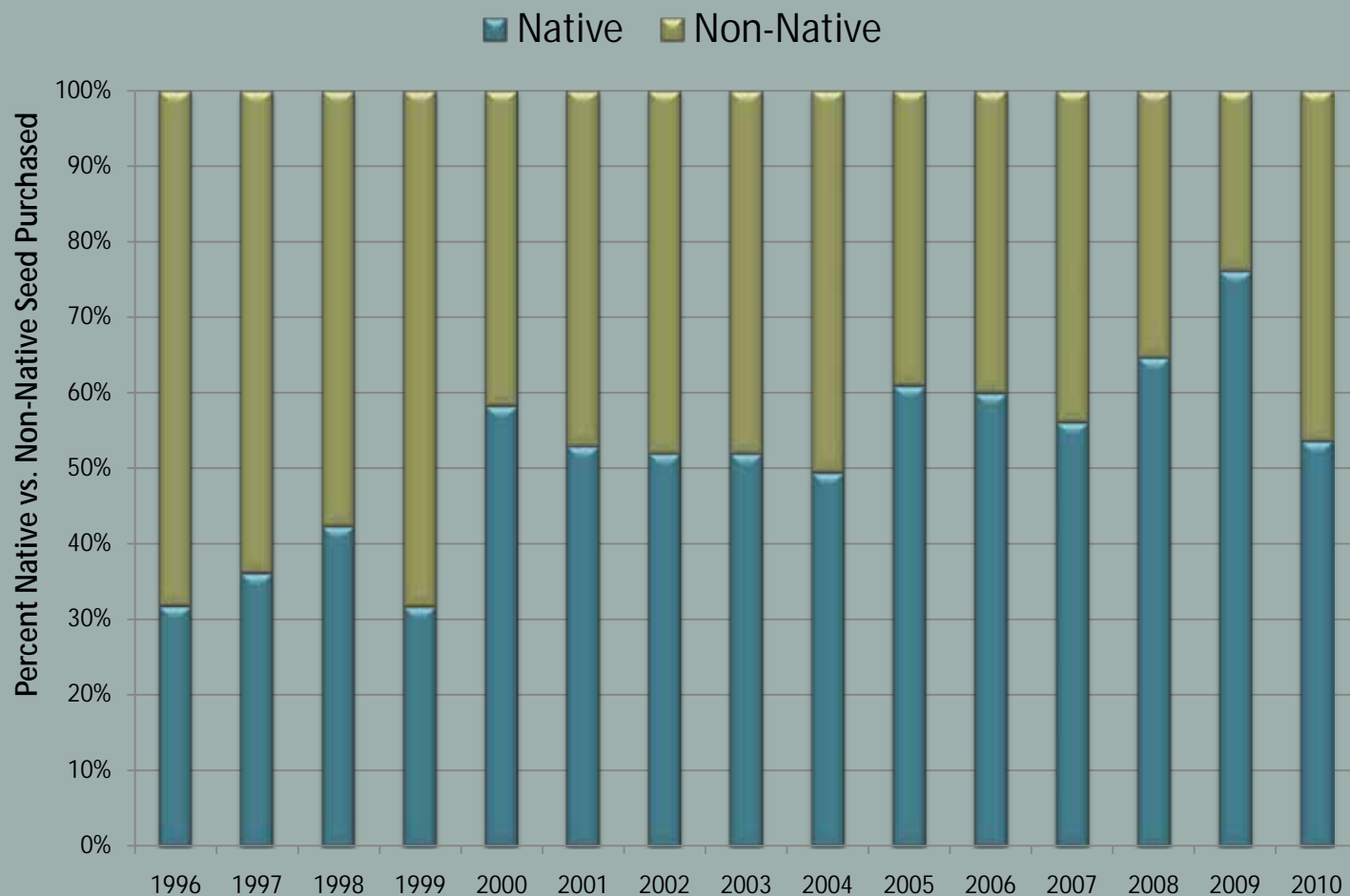
- Directs "...the agencies to develop a long-term program to manage and supply native plant materials for various Federal land management restoration and rehabilitation needs.
- Recommends "... the interagency Plant Conservation Alliance lead this effort."

Demand for Native Plant Materials

BLM Consolidated Seed Buys



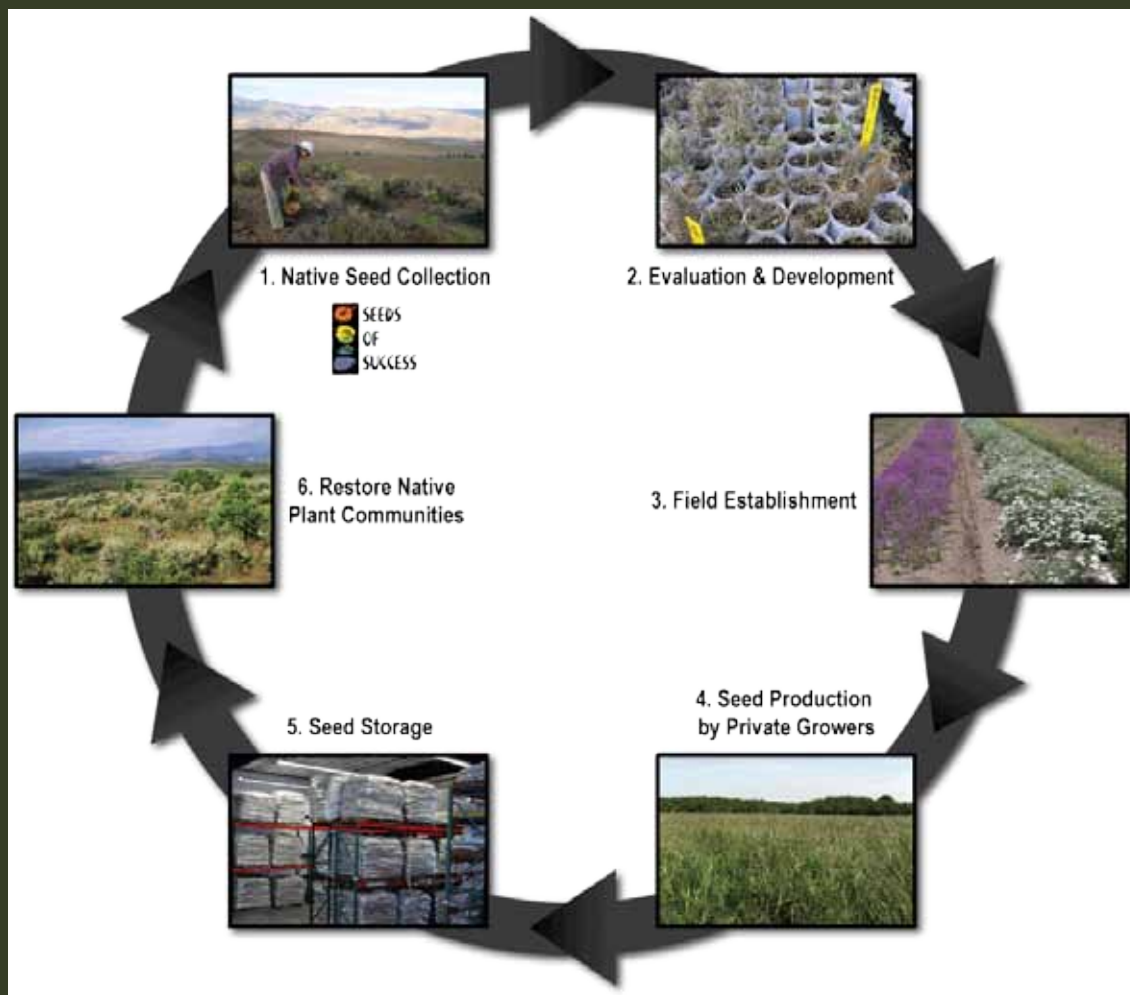
Consolidated Seed Buy



Demand for Native Plant Materials

	Native		Non-Native	
Habit	Species	Cost/Pound	Species	Cost/Pound
Grasses	<i>Hesperostipa comata</i> (needle and thread grass)	\$35.00	<i>Agropyron cristatum</i> (crested wheatgrass)	\$1.19
Forbs	<i>Lupinus sericeus</i> (silky lupine)	\$90.00	<i>Sanguisorba minor</i> (small burnet)	\$2.01
Shrubs	<i>Artemisia nova</i> (black sagebrush)	\$25.00	<i>Bassia prostrata</i> (forage kochia)	\$8.00

Native Plant Materials Development Process



National Native Plant Materials Development Program Annual Funding (BLM)

FY2001 - \$5.3 m

FY2006 - \$4.4 m

FY2002 - \$4.7 m

FY2007 - \$4.6 m

FY2003 - \$2.3 m

FY2008 - \$4.6 m

FY2004 - \$4.6 m

FY2009 - \$5.8 m

FY2005 - \$4.6 m

FY2010 - \$8.1 m

FY2011 - \$7.6 m ???


2001-2011 Total : \$56.6 million

National Native Plant Materials Development Program *Leveraged Funds (2001-2007)*



Royal Botanic Gardens Kew	\$2.3m
Chicago Botanic Garden	\$2.1m
Native Seed Network	\$1.7m
Center for Plant Conservation	\$1.5m
Uncompahgre Plateau Project	\$1.4m
Lady Bird Johnson Wildflower Center	\$0.8m
PCA/NFWF Grant Program	\$1.3m
Great Basin NPSIP (20+ partners)	\$3.0m
<u>Pacific Northwest (OR/WA)</u>	<u>\$1.5m</u>
	\$15 million

Partners on Native Plant Materials (over 500)



• Research Institutions	83
• Industry	118
• Federal Govt.	199
• Tribal Entities	22
• State Govt.	20
• Local Govt.	24
• Non-Profit Organizations	95
• Botanic Gardens	24

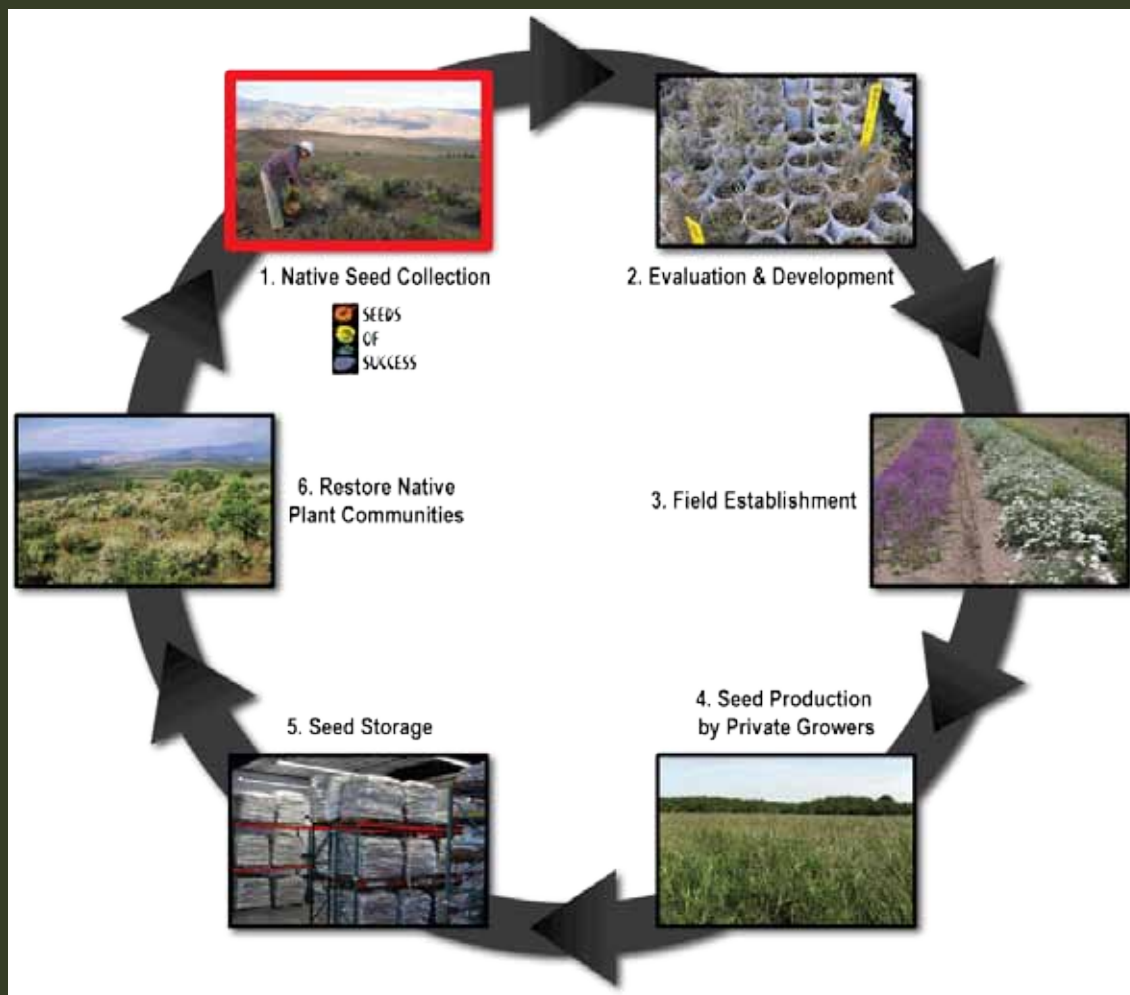
Ecoregional Native Plant Programs

- Great Basin Native Plant Selection & Increase Program
- **Colorado Plateau Native Plant Initiative**
- Pacific Northwest Native Plant Program
- California Native Plant Program
- Southwestern Deserts



Native Plant Materials Development Process

Native Seed Collection



Native Plant Materials Development Program



Seeds of Success Collection Sites

Agricultural Research Service, USDA

Bureau of Land Management, USDOl (all western states)

Department of Defense – 6 Parcels

Fish and Wildlife Service, USDOl – 11 Refuges

U.S. Forest Service, USDA – 33 Forests

Private Land

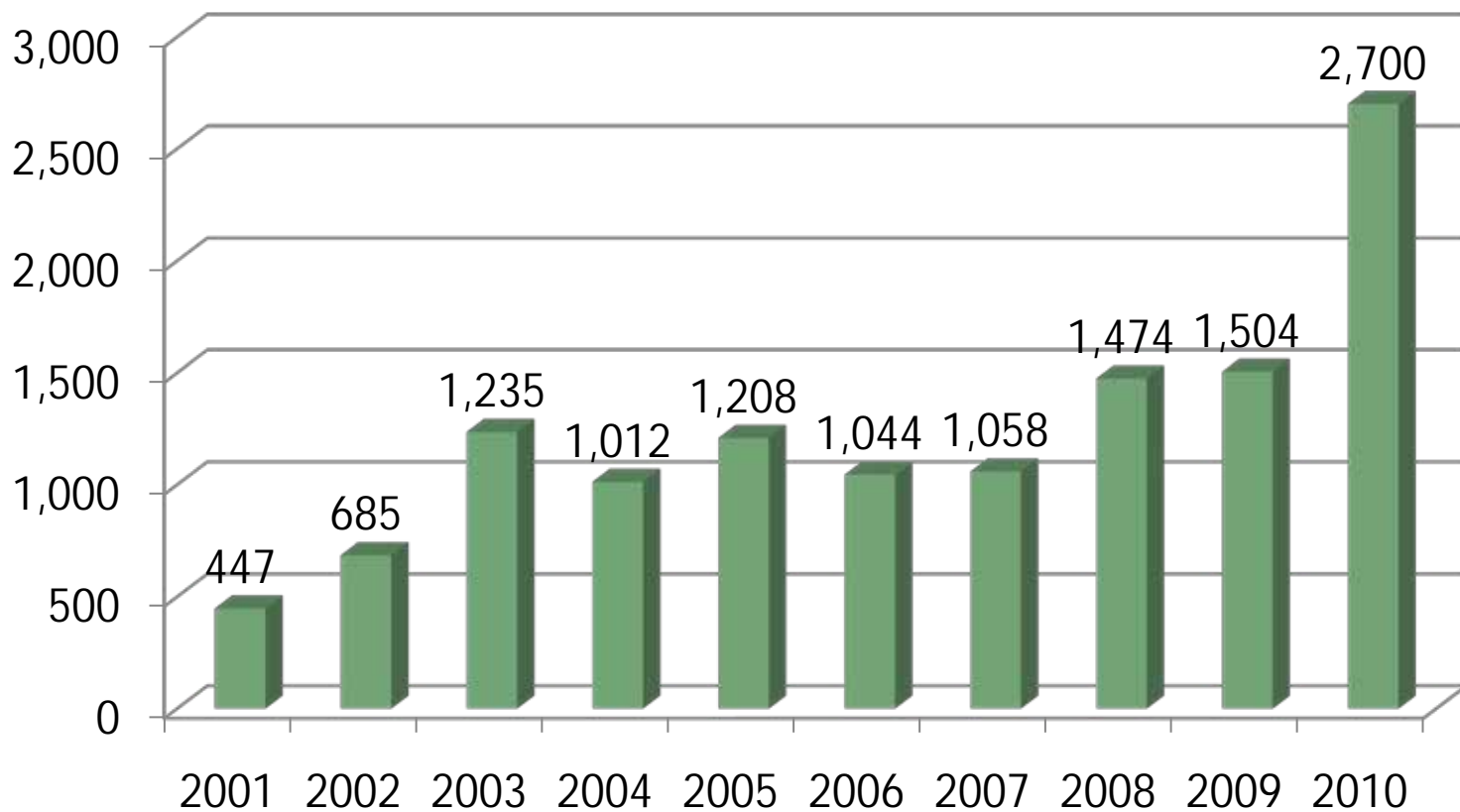
State and Local Government - 20

The Nature Conservancy – 25 Preserves

12,000+ Collections in the SOS National Collection

SOS National Collection

Yearly Seed Collections



Seeds of Success

Working Collection



Developing
Germination Protocols

Common
Garden Studies



Accomplishments

- Provided foundation seed for 193 native species to private growers.
- Enabled commercial availability of 122 native species.
- Coordinated almost 100 seed collecting teams.
- Made over 12,000 native seed collections.
- Evaluated more than 3,327 taxa of forbs, grasses & shrubs.
- Developed 4 training courses on selecting native plants, seed collecting, seed processing and trained over 2,000 people.
- Maintain the Seeds of Success website (www.nps.gov/plants/sos).
- Held 1st National Native Seed Conference



NPMDP Ecoregional Program Contacts

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2011-2012 Priorities for National Program



Establish National Interagency Advisory Group

Develop Interagency Strategic Plan

Establish Subactivity for Plant Conservation in BLM

Develop Climate Vulnerability Indices for restoration species

Develop Climate Envelopes for rare plants on NLCS units

Collect seed from over 1500 native plant populations for use in restoration, fire rehabilitation and climate impact projects.

Coordinate with Energy Program to ensure native plant materials are available for short-term reclamation and long-term restoration of energy development facilities.

Increase cooperation with private growers and seed industry to increase native seed diversity and quantity on the market.

Focus areas: Great Basin, Colorado Plateau, OR/WA eco-regions, Mojave, Sonoran and Chihuahuan Deserts.

Questions?

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